

# CONCORDIA UNIVERSITY

## Council of the Faculty of Engineering and Computer Science

### Minutes of Meeting 96-2

held

Thursday, 11 April 1996, at 2:00 p.m. in H-769

**Present:** Dr. D.J. Taddeo (Chair); Mr. M. Ahmadi (Graduate Rep.); Dr. A.J. Al-Khalili; Dr. C. Bédard; Dr. J. Campanelli; Dr. J. Drolet; Dr. M. El-Badry; Dr. P. Fazio; Dr. D. Feldman; Dr. C. Giguère; Dr. K. Ha; Ms. L. Harris (Library); Dr. S. Hoa; Mr. D. Janssen (Undergrad. Rep.); Ms. S. Kiruluta (Undergrad. Rep.); Dr. T. Krepec; Dr. C. Lam; Dr. V. Latinovic; Dr. H.F. Li; Dr. H. McQueen; Dr. R. Paknys; Ms. H. Patel (Undergrad. Rep.); Dr. D. Probst; Dr. T. Radhakrishnan; Dr. A.S. Ramamurthy; Dr. T. Stathopoulos; Mr. T. Too (Registrar's Office); Dr. C. Trueman; Dr. G. Turski (Secretary); Dr. G. Vatis

**Visitors:** Prof. B. Goldsmith; Dr. P. Grogono

**Regrets:** Dr. L. Landsberger; Dr. J. Lightstone; Dr. C. Suen; Dr. L. Tao

1. Adoption of Agenda

The Secretary distributed a revised agenda.

**Motion 96-2-1** The revised agenda was unanimously adopted. (C. Lam, T. Stathopoulos)

2. Adoption of Minutes

**Motion 96-2-2** The Minutes of Meeting 96-1 (19 January 1996) were unanimously approved. (C. Bédard, G. Vatis)

3. Chair's Remarks

The Chair welcomed Drs. R. Paknys and C. Trueman who are replacing until 31 May 1996 the sabbaticants Drs. E. Plotkin and G. Joos as representatives on Council from the Department of Electrical and Computer Engineering.

The Chair informed members that the next Council meeting has been moved from 17 May to 24 May 1996, to accommodate the Registrar Office's schedule for approving graduation lists.

The Dean reminded Council about the need for the Faculty to recommend an individual for an Honorary Doctorate and urged submission of names of possible candidates who could be so recommended at Council's May meeting.

Dr. Taddeo briefly described the accident and injuries suffered in February by colleague Dr. R. Guy. The latter is fortunately in good spirits and showing marked progress in his convalescence. The Dean called on Council to pass a motion wishing Dr. Guy a speedy and full recovery.

Motion  
96-2-3

That the members of the Council of the Faculty of Engineering and Computer Science wish their colleague and fellow member Dr. R. Guy a speedy and full recovery (T. Stathopoulos, C. Giguère)

Vote: Carried unanimously

4.

Undergraduate Curriculum Proposals (ECFC Doc. 96-2-1)

In introducing ECFC Doc. 96-2-1, Dr. Stathopoulos noted the extensive work of the Undergraduate Studies Committee to formulate the curricular recommendations for Council's consideration. There was also considerable interaction between the committee and the departments involved.

ECFC Doc. 96-2-1 comprises four sections. Dr. Stathopoulos provided a brief explanation of the proposals contained in Section One, which deals with courses in Complementary Studies. He noted the Complementary Studies Committee's input to the proposals.

Motion  
96-2-4

That the Council of the Faculty of Engineering and Computer Science adopt the proposed curriculum changes contained in Section One of ECFC Doc. 96-2-1 and recommend them to Senate for approval and implementation (T. Stathopoulos, J. Campanelli)

Dr. H. McQueen, Chair of the Complementary Studies Committee, thanked this committee for its hard work. He urged Council to adopt the proposed modifications, as they will both make clearer for the students the intent of Complementary Studies and fully satisfy at the same time the requirements set by the Canadian Engineering Accreditation Board.

Vote: Carried unanimously

Dr. Stathopoulos provided a brief explanation of the proposals contained in Section Two, which deals with courses in Civil Engineering. He noted that changes proposed in this section are minor.

**Motion 96-2-5** That the Council of the Faculty of Engineering and Computer Science adopt the proposed curriculum changes contained in Section Two of ECFC Doc. 96-2-1 and recommend them to Senate for approval and implementation (T. Stathopoulos, M. El-Badry)

Vote: Carried unanimously

Noting that the proposals contained in Section Three, which deals with courses in Computer Science, are quite extensive, Dr. Stathopoulos invited Dr. C. Lam to brief Council on them. Dr. Lam explained that the intent behind changes in Computer Science offerings was to streamline the curriculum and ensure its currency and relevance. Henceforth the department will offer four options, rather than five. The core of its programme has been strengthened and the advanced courses have been grouped as electives so as to facilitate scheduling.

**Motion 96-2-6** That the Council of the Faculty of Engineering and Computer Science adopt the proposed curriculum changes contained in Section Three of ECFC Doc. 96-2-1 and recommend them to Senate for approval and implementation (T. Stathopoulos, C. Lam)

Vote: Carried unanimously

Dr. Stathopoulos provided a brief explanation of the proposals contained in Section Four, which deals with courses in Mechanical Engineering.

**Motion 96-2-7** That the Council of the Faculty of Engineering and Computer Science adopt the proposed curriculum changes contained in Section Four of ECFC Doc. 96-2-1 and recommend them to Senate for approval and implementation (T. Stathopoulos, S. Hoa)

Vote: Carried unanimously

## **5. Graduate Curriculum Proposals (ECFC Doc. 96-2-2)**

Dr. Stathopoulos briefed Council on the graduate curriculum proposals and noted the work done on these proposals by the Graduate Studies Committee. The proposed Certificate in Building Studies involves essentially the clustering of existing graduate courses into specific subdisciplines within Building Engineering. Comprising 15 credits, the Certificate Programme would carry no resource implications.

An ensuing discussion clarified some concerns about the possibility of double-counting, whereby the credits obtained in the Certificate Programme could be counted toward a Master's degree. In line with the existing regulations and practices of the School of Graduate Studies, such counting is possible only if students transfer from one programme to another; it would not be possible, however, to use a completed Certificate Programme (or several such) towards another degree.

**Motion  
96-2-8**

That the Council of the Faculty of Engineering and Computer Science adopt the proposed curriculum changes contained in ECFC Doc. 96-2-2 and recommend them to Senate for approval and implementation (T. Stathopoulos, D. Feldman)

Vote: Carried unanimously

**6. Graduate Slot Course in Civil Engineering (ECFC Doc. 96-2-5)**

The Secretary distributed ECFC Doc. 96-2-5. Dr. Stathopoulos explained that the proposal for the slot course CIVI 690V was studied and approved by the Graduate Studies Committee. The course will be offered this coming summer.

**Motion  
96-2-9**

That the Council of the Faculty of Engineering and Computer Science approve the course CIVI 690V "Unit Operations in Environmental Engineering," described in ECFC Doc. 96-2-5 as a slot course (T. Stathopoulos, M. El-Badry)

Vote: Carried unanimously

**7. Social Aspects of Engineering (ECFC Doc. 96-2-3; Doc. 96-2-4)**

Dr. H. McQueen, Chair of the Complementary Studies Committee (CSC), provided a brief background to the committee's recent efforts. He explained that while the CSC was inactive for a number of years, when it convened in November 1995 its aim was to examine some of the reservations expressed by the recent CEAB accreditation reviews about the Social Aspects of Engineering part of the Complementary Studies curriculum. In particular, the CEAB accreditation teams felt that engineering students did not have a sufficient awareness of the central issues and thought process in the humanities and the social sciences. The students' abilities to apply principles from these disciplines to engineering activities is thereby limited.

Dr. McQueen stated that Concordia engineering students do in fact meet all of the CEAB criteria for Complementary Studies, but that the Visiting Teams' judgment was due in large measure to the absence in the University Calendar of a proper description of them. He noted that our Complementary Studies curriculum

compares quite favourably with that found at other Quebec universities; the latter in fact consider Concordia to be the pioneer and leader in the field.

Since courses in Social Aspects of Engineering should enable students to think critically about their profession in an interdisciplinary manner, in Dr. McQueen's view meeting this objective compels limiting these courses' class size to a maximum of thirty students.

**Motion  
96-2-10**

**Whereas** the Social Aspects courses are of the linkage type as specified by the CEAB, that is, they are analogous to Design courses in developing the student's ability to apply social sciences and humanities principles to engineering activities

**Whereas** the courses according to the CEAB also have the role of developing the leadership qualities and multidisciplinary awareness of the student

**Whereas** the courses are taught by interdisciplinary experts who are interested in clarifying the role of the engineer in society and in relation to other disciplines

**Whereas** the courses are electives given in the final year where it is common that elective courses have a limited number of students

**Whereas** the courses have been planned and conducted for more than 25 years with a pedagogical format which encourages active participation by the students

**Be it resolved** that the Social Aspects courses be limited to no more than 30 students and that any excess students should be advised to select courses from List B (as outlined on p. 2 of ECFC Doc. 96-2-4)

Several Council members noted that limiting enrollment in Social Aspects of Engineering courses would soon lead to demands to cap class size in other type of courses that demand individualized attention to students on the part of the instructors who teach them. While it was generally felt that smaller classes are certainly desirable and the values and skills promoted by all Complementary Studies courses important and in demand, in the current context of budgetary compressions the proposed limits on class size are a luxury the Faculty may not be able to afford. It was also pointed out that in light of ever new pedagogical tools and means of delivery of educational programmes, more students can be presently accommodated in courses than in the past.

Dr. McQueen remarked that Social Aspects courses go far beyond mere absorption of information by the students, so that putting faith in new educational technologies is unduly optimistic. He explained, in addition, that the courses in question are primarily taught by part-time faculty, thereby in fact materializing a saving for the Faculty.

Upon being granted speaking privileges, Prof. B. Goldsmith, Coordinator of the Social Aspects of Engineering programme, spoke in favour of the motion. In her view, the individualized instruction centered around project preparation and presentation requires much time, dedication and effort, and therefore reasonably small classes. The added difficulty for engineering students who take Social Aspects courses is that these are unlike the rest of the engineering curriculum and involve concepts and the kind of research with which students are generally unfamiliar. Prof. Goldsmith concluded that large classes will defeat the purpose for which the Social Aspects curriculum was originally established.

Vote: 2 in favour; 9 opposed; 12 recorded abstentions

Motion  
96-2-11

That Council receive the *Summary Report of the Complementary Studies Committee* (H. McQueen, T. Stathopoulos)

Vote: Carried unanimously

8.

#### ENCS Budgetary/Academic Planning

The Dean presented a brief outline of Concordia's current financial situation. He explained that the planning process is ongoing, with the extent of the budget cuts for each of the Faculties yet to be definitively determined. Overall, the University must reduce its budget by approximately \$12 M, to be distributed between the academic and non-academic sectors according to a ratio of about 66% to 33%. It is hoped that the bulk of savings needed will be generated by the currently offered retirement programme for which, in total, there are 220 eligible faculty members. Should these savings not materialize, other measures (such as salary rollbacks) may need to be implemented.

Within the Faculty the Executive Committee has looked over the past several months at various ways to reduce the budget and a final plan will be proposed some time toward the end of May. The Dean informed that a general assembly will be held in due course for all professors and staff to inform them of the measures and direction the Faculty will be taking.

In response to Dr. Probst's question whether vertical cuts are no longer considered within the ongoing academic planning, Dr. Taddeo explained that this was not the case, but that the very short time-frame in which decisions need to be taken for the next fiscal year may not allow at this time for extensive implementation of this strategy.

In Dr. Lam's view, a greater circulation of the relevant data would dispel for many faculty members questions about the budget situation and the planning process. He added that the current funding formula for universities is far from perfect and needs some, perhaps even major, revision.



9. Approval of Membership of the Hearing Committee (Code of Conduct)

The Dean explained that to date Council has not elected for the current academic year a Hearing Committee for breaches of the Academic Code of Conduct (e.g., cheating). He informed that the current faculty members on the Appeals Committee who had been elected to that body in Fall 1995 have been contacted by the Office of the Dean and are willing to serve on the Hearing Committee until 31 August 1996, if approved by Council.

Motion 96-2-12 That Profs. C. Goldman, V. Latinovic, L. Narayanan, V. Ramachandran, and F. Haghighat all be approved as members of the Hearing Committee (Code of Conduct--Academic), until 31 August 1996 (G. Vatistas, C. Bédard)

Vote: Carried unanimously

10. Other

- Concordia Student Life Awards

The Dean called for a motion of congratulations to D. Dolman, D. Janssen, and H. Patel--all members of the executive of the ECA--in recognition and appreciation of their being chosen as recipients of the Concordia Student Life Awards.

Motion 96-2-13 That Council offer its sincere congratulations to D. Dolman, D. Janssen, and H. Patel for their being chosen as recipients of the 1995-96 Concordia Student Life Awards (C. Giguère, G. Vatistas)

- Proposal from Dr. J. Drolet that information related to Council and its functioning be posted on the World Wide Web

The Secretary distributed Dr. Drolet's proposal that information related to the ENCS Faculty Council be regularly posted on the World Wide Web. An ensuing discussion revealed that while the idea was generally welcomed, acting upon it presently would be premature in view of the shortcomings attending many of Concordia's current presentations on its WWW site. It was decided that the proposal merits revisiting in the future, once the content and quality of these presentations become standardized.

11. Adjournment

The meeting was adjourned at 4:00 p.m.